

Prof. Ts. Dr. Mohd Ruzaimi Bin Mat Rejab

Professor

Faculty of Mechanical & Automotive Engineering Technology
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WoS Research ID : [F-2884-2015](#)

Scopus ID : [25646439600](#)

Google Scholar : [M.R.M.Rejab](#)



Biography

Ruzaimi received his Bachelor and Master's degrees in Mechanical Engineering from Universiti Teknologi Malaysia (UTM). He started his career as a Research Officer at Centre for Composite (PUSKOM), UTM from 2004 to 2005, and then joined Kolej Universiti Kejuruteraan & Teknologi Malaysia (KUKTEM) (now is known as Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA)) as a Lecturer at the Faculty of Mechanical Engineering (FKM) in May 2005. In June 2005, he was selected to be a Fellow of Student's Residential College 1. A year after that in 2006, he was appointed as the Principal of Student's Residential College 2. After completing his tenure as the principal in August 2007, he was holding the position of the Head of the Mechanical Engineering Programme until April 2008. Later, he was appointed as the Deputy Dean (Academic & Student Development Affairs) in the FKM from May 2008 until September 2009. In late of year 2013, he completed his Doctorate degree in design, fabrication, modelling and testing of novel lightweight structures, at the Impact Research Centre, University of Liverpool. Early of year 2014, he was appointed as the Head of Programme (Automotive Engineering), a special international collaboration program with the Karlsruhe University of Applied Science, Germany until February 2019. Then, he was appointed to be a Deputy Dean for Student Development & International for 6 months (Feb – July 2019). Later, he was appointed as Director of German Academic Collaboration Centre (GACC) for 2 years. Now, he is Director of Centre for Strategic Academic Collaboration. His research interests are in novel lightweight structures, polymer composites, sandwich structures, polymeric foam studies, computational mechanics and finite element method, mechanical design and material testing and performance evaluation. He also involves actively in research and development projects, consultation works, academic discussion activities and social services. He has published more than 100 papers in journals and conferences. Professionally, he is a Professional Technologist (P.Tech), certified by the Malaysia Board of Technologies (MBOT), and a Chartered Engineer (C.Eng) through the Institute of Mechanical Engineers (IMechE) UK. He is also a Certified Auditor for the Malaysian Qualifications Agency (MQA) and the Technology and Technical Accreditation Council (TTAC) - MBOT. Additionally, he is a member of several professional bodies, including the Board of Engineers Malaysia (BEM), the American Society of Mechanical Engineers (ASME), the American Society for Composites (ASC), and the Malaysian Society for Engineering and Technology (MySET), among others.

Education Background

2009 – 2013	Doctor of Philosophy <i>School of Engineering, University of Liverpool</i>
2002 – 2004	M.Eng. (Mechanical Engineering) <i>Faculty of Mechanical Engineering, Universiti Teknologi Malaysia</i>
1998 – 2002	B.Eng. (Mechanical Engineering) <i>Faculty of Mechanical Engineering, Universiti Teknologi Malaysia</i>

Career/Academic Appointments

Apr 2022 – present	Director <i>Centre for Strategic Academic Collaboration, Universiti Malaysia Pahang Al-Sultan Abdullah</i>
July 2024 – present	Professor <i>Faculty of Mechanical & Automotive Engineering Technology, Universiti Malaysia Pahang</i>
Aug 2019 – Mac 2022	Director <i>German Academic Collaboration Centre, Universiti Malaysia Pahang</i>
Feb 2019 – July 2019	Deputy Dean (Student Development & International) <i>Faculty of Mechanical & Manufacturing Engineering, Universiti Malaysia Pahang</i>

Feb 2019 – June 2024	Associate Professor <i>Faculty of Mechanical & Automotive Engineering Technology, Universiti Malaysia Pahang</i>
Mar 2014 – Jan 2019	Head of Programme (Automotive Engineering) <i>Faculty of Mechanical Engineering, Universiti Malaysia Pahang</i>
Feb 2009 – Jan 2019	Senior Lecturer <i>Faculty of Mechanical Engineering, Universiti Malaysia Pahang</i>
May 2008 – Sept 2009	Deputy Dean (Academic & Student Development Affairs) <i>Faculty of Mechanical Engineering, Universiti Malaysia Pahang</i>
April 2007 – May 2008	Head of Programme (Mechanical Engineering) <i>Faculty of Mechanical Engineering, Universiti Malaysia Pahang</i>
Jun 2006 – Aug 2007	Principal of Student's Residential College 2 <i>Students Affairs & Alumni Department, Universiti Malaysia Pahang</i>
Jun 2005 – May 2006	Fellow of Student's Residential College 1 <i>Students Affairs & Alumni Department, Kolej Universiti Kejuruteraan & Teknologi Malaysia</i>
May 2005 – Jan 2009	Lecturer <i>Faculty of Mechanical Engineering, Kolej Universiti Kejuruteraan & Teknologi Malaysia</i>
Jan 2004 – May 2005	Research Officer <i>Centre for Composites (PUSKOM), Universiti Teknologi Malaysia</i>
Mar 2000 – June 2000	Trainee Engineer <i>Nagoya Plastic Industries, Kulim, Kedah</i>

Courses Taught

MME6143	Mechanical Engineering Design (Masters by Coursework)
BMM4893	Mechanics of Composite Materials
BMM4623	Mechanical System Design
BMM4723	Mechanism Design
BHA4624	Team Oriented Project Study
BMM3623	Mechanical Design
BTD3333	Mechanics of Composite Materials
BMM3562	Finite Element Method
BMM3011	Engineer & Society
BTD2133	Strength of Materials
BMM2613	Computer Aided Design
BMM2021	Quality & Environmental Management System
BMM1543	Strength of Materials
BMM1553	Dynamics
BHA1113	Engineering Materials
BHA1103	Statics
BMM1011	Fundamental of Engineering

Professional Affiliation

Engineering Council, United Kingdom	Chartered Engineer (C.Eng No. 653641)
Malaysia Board of Technology (MBOT)	Professional Technologies (P.Tech No. PT17120023)
Institute of Mechanical Engineers (IMechE)	Member (MIMechE No. 80290949)
American Society for Composites (ASC)	Member (ASC No. 123458537)
American Society of Mechanical Engineers (ASME)	Member (ASME No. 100021656)
International Association of Engineers (IAENG)	Member (IAENG No. 65487)
Board of Engineers Malaysia (BEM)	Graduate Engineer (BEM No. 42444R)
Malaysian Society of Engineering and Technology (MySET)	Life-member (MySET No. 01459)

Research Interests

Lightweight structures, composites, computational mechanics and finite element analysis, sandwich structures, automotive design and structures, nano/polymeric foam studies, impact mechanics, machine design and, material testing and performance evaluation.

Postgraduate Supervision

Level	Name	Title	Status	Role
PhD	Ma Quanjin	The Mechanical Properties of Novel Lightweight Sandwich Structure Based on Contoured-Cores	Graduated	Main Supervisor
PhD	Nur Khaleeda Binti Romli	The Mechanical Behavior of Sandwich Structures Based on Laser-Welded Approach	Graduated	Main Supervisor
PhD	Mohd Hilmy Naim Bin Mohd Yakin	Non-ordinary State-based Peridynamics for Brittle Materials	Graduated	Main Supervisor
PhD	Mohammad Soffi Bin Manda	Design of Tin Slag Polymer Concrete Composite for Structural Applications	Graduated	Main Supervisor
PhD	Mohammed Midhat Hasan	Design of Tool and Backing/Clamping System for Dissimilar Friction Stir Welding of High Strength AA7075-T6 and AA2024-T351 Aluminum Alloys	Graduated	Co-Supervisor
PhD	Mohammad Hazim Bin Mohamad Hamdan	Natural Woven Fabric Reinforced Epoxy and Polyester Composite	Graduated	Co-Supervisor
PhD	Mohammed Aussama Abbas	Development of Sugar Palm Fiber Reinforced Thermoplastic Polyurethane Composites	Graduated	Co-Supervisor
PhD	Idris Bin Mat Sahat	Fiber Reinforced Polymer Products with Fused Deposition Modelling Approach	Active	Main Supervisor
PhD	Nor Akmal Binti Halim	Development of Bio-Based Polymeric Composites Comprising Polylactic Acid (PLA) And Sugar Palm Fibres	Active	Co-Supervisor
PhD	Mohd Irman Bin Ibrahim	Composite B-Pillar Structure for Vehicle Protection Application	Active	Main Supervisor
PhD	Mohd Fadhil Bin Rani	Development of Fibre Metal Laminate Materials for Automotive Components	Active	Main Supervisor
PhD	Ahmad Yunus Nasution	Optimization of Crash-Box Design for Energy Absorption Devices	Active	Main Supervisor
PhD	Mohammed Abdelsamea Mohammed Ibrahim Rady	-UTM PhD student -	Active	Co-Supervisor
MSc	Noor Zakiah Binti Md Zaid	Mechanical Performance of Lightweight Sandwich Structure Based on Trapezoidal Corrugated-Core	Graduated	Main Supervisor
MSc	Zahidah Binti Ansari	Sandwich Square Honeycomb Structure from Biodegradable and Recyclable Composites	Graduated	Main Supervisor
MSc	Nur Khaleeda Binti Romli	Quasi-Static and Low-Velocity Impact Response on Fibre Metal Laminate	Graduated	Main Supervisor
MSc	Ahmad Fahmy Bin Jusoh	Characterization of Kenaf Fibre Trapezoid Sandwich Structure Based on Corrugated Cores	Graduated	Main Supervisor
MSc	Ma Quanjin	Design, Fabrication and Evaluation of Laboratory Scale 3-Axis Filament Winding Machine	Graduated	Main Supervisor
MSc	Mohamad Nazirul Mubin Bin Merzuki	Investigation on Mechanical and Modal Properties Of Aluminium Based Fibre Metal Laminates	Graduated	Main Supervisor
MSc	Saffirna Binti Mohd Soffie	Study on Failure Maps of Laser-welded I-core Sandwich Plates	Graduated	Main Supervisor

MSc	Mawarnie Binti Ismail	Fracture Behaviour of GFRP-Natural Hybrid Composite	Graduated	Main Supervisor
MSc	Zulkifli Bin Yusof	Failure Analysis of Leaked Pipelines Reinforced with Composite Wrapping System	Active	Main Supervisor
MSc	Zalinawati Binti Muhamad	Effect of Water Absorption on Physical and Mechanical Properties of Woven Buri (Corypha Uta) Reinforced Unsaturated Polyester Composite	Graduated	Co-Supervisor
MSc	Nur Syazwani Binti Mohd Noor	An Assessment of Driving Seating Comfort Based on Natural Fiber Material by Using Digital Human Modelling and Pressure Mapping Technique	Graduated	Co-Supervisor
MSc	Mohd Qayyum Akbar Bin Abdul Halim	Bulk Metallic Glasses with Rapid Cooling Technique	Graduated	Co-Supervisor
MEng	Ahmad Kamil Bin Mohamad	Periodic Two-dimensional Self-Reinforced Polypropylene Honeycomb Cores for Sandwich Structures	Graduated	Main Supervisor
MEng	Tuan Mohd Shakir Bin Abu Bakar	Energy Absorption Characteristic of Circular Tubes under Compression Loading	Graduated	Main Supervisor
MEng	Nik Siti Hasniati Binti Nik Leh	Finite Element Simulation of High Velocity Projectile Impact	Graduated	Main Supervisor
MEng	Zikriah Binti Zakaria	Finite Element Analysis of Thin-walled Tube Structures under Axial Compression Load	Graduated	Main Supervisor
MEng	Nor Hazwani Binti Mohd Yusof	Finite Element Analysis of Tube Structures under Oblique Impact	Graduated	Main Supervisor
MEng	Mohd Noorazam Bin Borhan	Finite Element Analysis of Pressure Vessel with Different Head Design	Graduated	Main Supervisor
MEng	Owi Eugene	Effect of Bullet Shapes on the High Velocity Impact Damage of Aluminium plate: Finite Element Modelling	Graduated	Main Supervisor
MEng	Irman Bin Ikhsan	Performance Evaluation of LNG Vapour Consumption on LNG Carrier Ship	Graduated	Main Supervisor
MEng	Masliana Binti Idris	Numerical Study on the Ballistic Impact Resistance of the Sandwich Panel with Aluminium Honeycomb Core	Graduated	Main Supervisor
MEng	Noraini Binti Abdul Aziz	Energy Absorption on 3D Printed Honeycomb Core Sandwich Panel	Graduated	Main Supervisor

Research Grants

Title	Type of Grant	Role	Amount (RM)	Status
Ballistic Impact Modelling Of Truss-Core Sandwich Structure Incorporating Carbon Fiber Reinforced Plastic Composite And Lightweight Aluminum Alloy	National Grant - FRGS	Leader	137,650	Active
Virtual Exhibition Space for Technical Historical Objects: Phase 2 - Augmented Reality	International Grant - DAAD Germany	Leader	430,134.25	Active
Investigation Of Selected Fillers As Potential Eco-Friendly Friction Materials For Sustainable Brake Pads	International Grant - Universitas Tarumanagara, Indonesia	Member	40,000	Active
Ballistic-Resistance Modelling of Contoured-core Sandwich Structure of Carbon Fibre Reinforced Plastic and Self-Reinforced Polypropylene Composites	National Grant - FRGS	Leader	101,700	Ended
Virtual Exhibition Space for Technical Historical Objects	International Grant - DAAD Germany	Leader	501,900	Ended

Mechanical Properties of Tin Slag Polymer Concrete Confined and Unconfined with FRP Under Compression	National Grant - CRG	Leader	160,000	Ended
Modelling of Damage Evolution of Grade 91 Steel under Creep Loading	National Grant - FRGS	Member	81,960	Ended
The Model of Microstrip Antenna Using Novel High Permittivity Composite Substrate for Wi-fi Communication System	National Grant - FRGS	Member	85,520	Ended
Elucidation of the nexus between carbon fiber composition and mechanical properties of Tapioca Polylactic Acid Polymer emphasizing Fused Deposition Modelling	National Grant - FRGS	Member	87,200	Ended
Peridynamic Modeling of Ductilisation of Lanthanum-based Metallic Glasses Foam	National Grant - FRGS	Member	90,700	Ended
Dynamical Behavior of Fiber Metal Laminates by The Free Vibration Method	Internal Grant - RDU	Leader	33,100	Ended
Test Bed Development (TDI) & Project Coordination and Dissemination	International Grant - BWS Germany	Member	371,520	Ended
Development of a Design Evaluation System Software for Home Appliances Remanufacturing	National Grant - Science Fund	Member	84,000	Ended
Multiaxial modelling of Corrugated-core Sandwich Structure	National Grant - FRGS	Leader	124,000	Ended
The Mechanical Behavior of Sandwich Structures based on Corrugated Cores	International Grant - Ningxia University, China	Leader	56,502	Ended
Formulation of Initial Flaw Size for New Crack Growth under Fatigue Loading	National Grant - FRGS	Member	95,700	Ended
Investigation on Seashell as Additional Armour for Protective Material	National Grant - FRGS	Member	46,000	Ended
Enhanced driver seating comfort in a small size car through digital human modelling (DHM) and pressure mapping method	National Grant - FRGS	Member	115,500	Ended
Characterization of Biodegradable Composites Based on Pineapple Leaf Fibre and Tapioca Bioplastic Resin	National Grant - FRGS	Member	82,000	Ended
Periodic Two-Dimensional Square honeycomb Structure from Biodegradable Composite: Finite Element Analysis and experimental Investigation	National Grant - RACE	Leader	50,000	Ended
Development of Fibre Metal Laminate Materials for Automotive Application	Internal Grant - RDU	Leader	33,000	Ended
Development of Cam Manufacturing Machine	Internal Grant - RDU	Leader	40,000	Ended
Development of Regenerative Brake Timing Control to Improve the Braking Performance of Small Electric Vehicle	National Grant - RAGS	Member	50,000	Ended
The effect of PLA matrix architecture on the mechanical performance of PLA-based degradable biocomposites	National Grant - RAGS	Member	50,000	Ended
Development of Periodic Two-dimensional Honeycomb Structures for Sandwich Panels	Internal Grant - RDU	Leader	37,000	Ended
Influence of Moisture Absorption on Mechanical Properties of A Woven Roselle Composite used for Automotive Application	Internal Grant - RDU	Member	30,000	Ended
Investigation on Initial Peak Force of Foam-filled Column subjected to Compression Loading	Internal Grant - RDU	Member	32,000	Ended

Investigation of Fibre Reinforcement Toward Polymer Production Emphasizing Fused Deposition Modelling	Internal Grant - RDU	Member	20,000	Ended
Computational Method to Estimate Fatigue Life and Durability of Spur Gear by using Stress-Life (SN) and Measurement of Root Stress Data	Internal Grant - RDU	Member	26,500	Ended
Development of Self-Healing Composite Structures	Internal Grant - RDU	Member	30,500	Ended
Development of Welded Stiffener Plates using Dissimilar and Similar Metal Joining Technique	Internal Grant - RDU	Member	35,290	Ended
Optimization of Grinding Wheel Parameters with Intelligent Techniques	Internal Grant - RDU	Member	40,000	Ended
Investigation of Refrigerator Performance Using Experimental and Simulation Method	Internal Grant - RDU	Member	35,000	Ended
Design and Develop Blow Mould Using Machining Optimization Parameters	Internal Grant - RDU	Member	35,000	Ended
A Novel and Flexible Solar Car Kit for Educational Use	Internal Grant - RDU	Member	32,000	Ended
Design and Development of the Multi Purpose Polymer Floor Tile to Meet Performance Needs of Athletes	Internal Grant - RDU	Member	19,500	Ended
Development of Computer-based Control System for Motor Applications	Internal Grant - RDU	Member	58,400	Ended
Development and Performance Evaluation of Polymeric Foam as Cores of Composite Structures for Automotive and Marine Industries	National Grant - IRPA	Member	156,400	Ended
The Behaviour of Polymeric Foam for Cores of Composite Sandwich Structure	Internal Grant - Short-term	Member	19,500	Ended
Development of Cellular Composite Structure for Lightweight Vehicle Applications	Internal Grant - Seed Money	Leader	5,000	Ended

Consultation Projects

Project Title	Client	Amount (RM)
Consultation and Fabrication of Fibre Metal Laminate specimens for Blast Test	PUSKOM UTM	3,000
The Provision of Fitness for Service through Finite Element Analysis and Failure Analysis Diagram	Petronas MTBE	16,000
The Provision of Fitness for Service through Finite Element Analysis and Failure Analysis Diagram	Pengkalan Offshore Sdn Bhd	2,000
The Provision of Fitness for Service through Finite Element Analysis for V-5425 Flare Scrubber	UIE-Solution Sdn Bhd	9,900
Consultation for Petronas Carigali Angsi-B Crane B-7020 Structural Analysis	RIA Solution Sdn Bhd	12,000
Design and fabrication of Rudder and Reverse Trust Unit of the Hi-Tech Hovercraft	CITO Marketing Sdn Bhd	Undisclosed
Fabrication of the Composite Bridge at Taman Tasik UTM	PUSKOM UTM	Undisclosed
Design, testing, fabrication and maintenance of GFRP Water Tank	Autostech Sdn Bhd, Mokhlas Team Work Sdn Bhd	Undisclosed

Patents

- [1] *Portable Filament Winding Machine with Remote Control System*, Patent No: **PI 2018701785**, Malaysia Pattern
- [2] *Filament Winding Machine with IoT Control System Technology*, Patent No: **ZL201921360351.8**, People's Republic of China Pattern

Professional Experiences

International & National Appointment:

- [1] *Malaysia Qualification Agency (MQA) – Certified Accreditation Assessor (Certificate, Diploma, Bachelor, Masters & PhD) & APEL.A*
- [2] *Malaysia Board of Technology (MBOT) – Certified Accreditation Assessor (Diploma, Bachelor)*
- [3] *Malaysia Board of Technology (MBOT) – Panel Assessor for new Professional Technologist in cluster of Automotive Technology (AT).*
- [4] *Visiting Professor at School of Mechanical Engineering, Ningxia University, China*
- [5] *Research Grant Evaluator for Ministry of Science & Technology Malaysia*

Thesis Examiner:

- [1] *Mohd Shahrom bin Ismail (P041710004), PhD thesis - Universiti Teknikal Malaysia Melaka*
- [2] *Fairuz Mardiah binti Mahidan (M041910034), MSc thesis – Universiti Teknikal Malaysia Melaka*
- [3] *Zohaib Khan (GD190017), MSc thesis – Universiti Tun Hussein Onn Malaysia*
- [4] *Mohamad Airul Amin bin Md Dani (MKM163005), MSc thesis – Universiti Teknologi Malaysia*
- [5] *Emi Hafizzul bin Jamaluddin (2018600234), MSc thesis – Universiti Teknologi Mara*
- [6] *Mohd Haziq bin Dzulkifli (PKM153030), PhD thesis – Universiti Teknologi Malaysia*
- [7] *Muhammad Luqman bin Abd. Rahim (MRT203020), MSc thesis - Universiti Teknologi Malaysia*

Associate Editor-in-Chief:

- [1] *Journal of Mechanical Engineering Sciences (JMES – Scopus indexed Journal [Q2]) – reviewing and editing manuscripts more than 250 articles. (2014 -2017)*

Journal Reviewer:

- [1] *Composites Part B: Engineering (ISI – Q1)*
- [2] *Composite Structures (ISI – Q1)*
- [3] *Composites Communications (ISI – Q1)*
- [4] *International Journal of Solids and Structures (ISI – Q1)*
- [5] *Journal of Manufacturing Processes (ISI – Q1)*
- [6] *Journal of Materials Research and Technology (ISI – Q1)*
- [7] *Thin-Walled Structures (ISI - Q1)*
- [8] *High Performance Polymer (ISI - Q2)*
- [9] *Journal of Sandwich Structures (ISI - Q2)*
- [10] *Journal of Applied Science & Process Engineering (JASPE – Scopus Indexed Journal)*
- [11] *International Journal of Automotive & Mechanical Engineering (IJAME – Scopus Indexed Journal)*
- [12] *Indian Journal Science and Technology (IJST)*
- [13] *ARPN Journal of Engineering and Applied Sciences (Scopus Indexed Journal)*

Technical Paper Reviewer:

- [1] *5th Mechanical Engineering Research Day (MERD2018), 2018, Melaka*
- [2] *4th International Conference on Recent Advances in Automotive Engineering & Mobility Research (ReCAR2017), 2017, Kuala Lumpur.*
- [3] *4th International Conference on Mechanical Engineering Research (ICMER2017), 2017, Kuantan.*
- [4] *3rd Mechanical Engineering Research Day (MERD2017), 2017, Melaka*
- [5] *The International Conference on Nano-materials, Function and Composite Materials (ICNFCM2017), 2017, Bangkok*
- [6] *3rd International Conference on Science and Social Research (CSSR2016), 2016, Putrajaya*
- [7] *3rd International Conference on Defence and Security Technology (DSTC2016), 2016, Putrajaya*
- [8] *3rd Advanced Materials Conference 2016 (AMC2016), 2016, Langkawi*
- [9] *3rd International Conference on Mechanical Engineering Research (ICMER2015), 2015, Kuantan.*
- [10] *Automotive Innovation and Green Vehicle Conference (AiGEV2014), 2014, Kuantan.*
- [11] *IEEE International Conference on Space Science & Communication (IconSpace2013), 2013, Kuala Lumpur.*
- [12] *Malaysian Technical Universities Conference on Engineering and Technology (MUCET) 2009, Kuantan, Pahang.*
- [13] *4th International Conference on University Learning and Teaching (InCULT08), 2008, Shah Alam.*

Technical Auditor/Evaluator:

- [1] Ahli Panel Penilai (Auditor) for Malaysian Qualifications Agency (MQA), 2015 – now. Audited: Diploma in Technology Programme = 40 Vocational College of Malaysia, 20 private institutions ; Degree in Technology Programme = 6 private institutions
- [2] Ahli Panel Penilai (Auditor) for Technology and Technical Accreditation Council (TTAC-MBOT), 2017 – now. Audited: Diploma: 10 for Provisional & Full Accreditation ; Degree: 4 private institutions ; Master: 1 private institution
- [3] Expert Panel for COPPA –TVET, evaluation of new MQA manual at one private institution
- [4] External Examiner for Diploma in Manufacturing Engineering (Automotive Manufacturing), KKTU Kuantan: 1 December 2020 – 30 November 2023.
- [5] External Examiner for Bachelor of Mechanical Engineering Technology (Automotive Technology), Universiti Teknikal Malaysia Melaka (UTeM), Melaka: 1 December 2019 – 30 November 2023.
- [6] External Examiner for Department of Mechanical Engineering, Polytechnic Kota Bharu, Kelantan: 15 April 2018 – 15 April 2020.
- [7] External Examiner for Diploma in Mechanical Engineering (Automotive), Department of Mechanical Engineering, Polytechnic Sultan Azlan Shah, Perak, 2019.
- [8] External Examiner for Bachelor of Technology in Mechatronics, Wawasan Open University, Penang: 13 August 2019 – 12 August 2025.
- [9] Judge in Innovation Exhibition at CITREX2020
- [10] Auditor for Academic Quality Management System (AQMS) UMP, 2016
- [11] Interviewer for Mercedes-Benz Scholarship Award, Sept. 2015
- [12] Lead Auditor in Teaching and Learning MS ISO 9001:2000, 2008
- [13] Judge for Integrated Design Project and Exhibition, FKM, December 2015
- [14] Panel umpire for Pertandingan Rekapipta dan Inovasi KUKTEM 2006, in-conjunction with 1st Expoconvo'06

Journal Publications

- [1] Quanjin Ma, **M.R.M. Rejab**, Yiheng Song, Yue Yan, Bo Sun, Lin Feng Ng, A. Praveen Kumar, Haichao Hu, Ahmad Yunus Nasution “Numerical modelling of composite spherical-roof contoured core (SRCC) sandwich panels subjected to blast loading”. 2024. Mechanics of Advanced Materials and Structures, pp. 1-23. <https://doi.org/10.1080/15376494.2024.2383324> (ISI IF: 3.60)
- [2] Quanjin Ma, **M.R.M. Rejab**, Santosh Kumar Sahu, Yiheng Song, Lin Feng Ng, A. Praveen Kumar, “Experimental study on composite spherical-roof contoured-core (SRCC) sandwich panels under the V-shaped quasi-static indentation loading”. 2024. Vacuum, vol 227, 113457. <https://doi.org/10.1016/j.vacuum.2024.113457> (ISI IF: 3.80)
- [3] Quanjin Ma, **M.R.M. Rejab**, Yiheng Song, Xin Zhang, Muammal M. Hanon, M.H. Abdullah, A. Praveen Kumar, “Effect of infill pattern of polylactide acid (PLA) 3D-printed integral sandwich panels under ballistic impact loading”. 2024. Materials Today Communications, vol 38, 107626. <https://doi.org/10.1016/j.mtcomm.2023.107626> (ISI IF: 3.80)
- [4] Quanjin Ma, **M.R.M. Rejab**, Mohammad Azeem, Shukur Abu Hassan, Binghua Yang, A. Praveen Kumar, “Opportunities and challenges on composite pressure vessels (CPVs) from advanced filament winding machinery: A short communication”. 2024. International Journal of Hydrogen Energy, Vol. 57, pp. 1364-1372. <https://doi.org/10.1016/j.ijhydene.2024.01.133> (ISI IF: 7.20)
- [5] Usaid Ahmed Shakil, **Mohd Ruzaimi Mat Rejab**, Norazlianie Szali, Shukur Abu Hassan, Mohd Yazid Yahya, Quanjin Ma, “Damage characterisation of amine-functionalized MWCNT reinforced carbon/epoxy composites under indentation loading”, 2023. Journal of Materials Research and Technology, Vol. 24, pp. 6713-6729. <https://doi.org/10.1016/j.jmrt.2023.04.242> (ISI IF: 6.4)
- [6] Manda, Muhamad Soffi, **Mohd Ruzaimi Mat Rejab**, Shukur Abu Hassan, Mat Uzir Wahit, and Didik Nurhadiyanto. 2023. "Experimental Study on Tin Slag Polymer Concrete Strengthening under Compression with Metallic Material Confinement." 2023. Polymers, Vol. 15(4), 817. <https://doi.org/10.3390/polym15040817> (ISI IF: 5.0)
- [7] Usaid Ahmed Shakil, Shukur Abu Hassan, Mohd Yazid Yahya, **Mohd Ruzaimi Mat Rejab**. “A focused review of short electrospun nanofiber preparation techniques for composite reinforcement”. 2023. Nanotechnology Reviews, vol. 11(1), pp. 1991-2014. <https://doi.org/10.1515/ntrev-2022-0116> (ISI IF: 6.739).
- [8] Quanjin Ma, **M.R.M. Rejab**, Shukur Abu Hassan, Haichao Hu, A. Praveen Kumar. “Potentiality of MWCNT on 3D-printed bio-inspired spherical-roof cubic core under quasi-static loading”. 2022. Journal of the Mechanical Behavior of Biomedical Materials. Vol. 136, pp. 105514. <https://doi.org/10.1016/j.jmbbm.2022.105514> (ISI IF: 4.042).
- [9] Quanjin Ma, **M.R.M. Rejab**, M.S.Idris. “Dataset of lab-scale 3-axis winding machine integrated with the portable real-time winding angle measurement system”. 2022. Data in Brief. Vol. 45, pp. 108731. <https://doi.org/10.1016/j.dib.2022.108731> (ISI IF: 2.010).

- [10] Quanjin, M., Merzuki, M., **M.R.M. Rejab**, M.S.M. Sani, Bo Zhang, "Numerical Investigation on Free Vibration Analysis of Kevlar/Glass/Epoxy Resin Hybrid Composite Laminates". 2022. Malaysian Journal on Composites Science & Manufacturing, 9(1), 11–21. <https://doi.org/10.37934/mjcsms.9.1.1121> (Scopus Q2 SJR: 0.32).
- [11] Ma Quanjin, **M.R.M.Rejab**, J.P.Siregar, Zhongwei Guan, "A review of the recent trends on core structures and impact response of sandwich panels". 2021. Journal of Composite Materials, Vol.55(18), pp. 2513-2555. <https://doi.org/10.1177/0021998321990734>. (ISI IF: 2.591).
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